

REMARKS

Claims 227-234, 240, 243, and 248-262 are pending in this application. The Examiner has withdrawn claims 248-262. Applicants have amended claims 227, 228, 230, 234, 240, and 243 without prejudice or disclaimer. Support for the amendments can be found in the application as filed, for example, in Example 3 at pages 49-52 and in Example 6 at pages 55-59 of the specification, and Figures 10, 11, and 16. No new matter has been added.

Withdrawn Rejection

Applicants thank the Examiner for withdrawing the 35 U.S.C. §§ 102/103 rejection based on Heddle et al. (*Immunology* 29:185-195 (1975); "Heddle") that had been raised in the previous Office Action.

Priority Claim

On pages 2-3 of the Action, the Office opines on the priority claim made by the Applicants in the present continuation-in-part application. Applicants respectfully disagree with the Office's position, and reserve the right to address the Office's position in the future.

As stated in the MPEP at § 201.08:

Unless the filing date of the earlier nonprovisional application is actually needed, for example, in the case of an interference or to overcome a reference, there is no need for the Office to make a determination as to whether the requirement of 35 U.S.C. 120, that the earlier nonprovisional application discloses the invention of the second application in the manner provided by the first paragraph of 35 U.S.C. 112, is met and whether a substantial portion of all of the earlier nonprovisional application is repeated in the second application in a continuation-in-part situation. (emphasis added)

Applicants submit that it is not necessary to address this matter in the present reply.

Withdrawn Claims 248-262

The Office maintains its position that claims 248-262 are withdrawn. At pages 2-3 of the Office Action, the Office states, "Applicants' argument would be true if 'dependent' claims 248-262 actually provided some further limitation for the subject matter in claims 227-234, 240, and

243. However, this is not the case (i.e., these claims were improperly listed as dependent claims).”

Applicants respectfully disagree. Claim 248, for example, recites that the peptides, polypeptides, or proteins of claim 227 are linked via a short linker to the final portion of M13 gene III. Applicants fail to understand why the Office alleges that linking the peptides, polypeptides, or proteins to another element creates a new invention group.

The Office's further allegations at page 3 of the Office Action include, “Here, Applicants elected a library of peptides, polypeptides, or proteins that were not displayed rather than a library that is displayed on a phage with the use of a linker” (parenthetical text omitted from quotation).

Applicants respectfully point out that nothing in the language in examined claim 227 (which falls within the elected invention) excludes the claimed library of peptides, polypeptides, or proteins from being displayed, e.g., on a phage, e.g., with the use of a linker.

Further, based on the Office's reasoning, because claim 248 does not recite that the library claimed therein is displayed, Applicants do not understand why claim 248 was withdrawn.

For at least these reasons, and the reasons articulated in Applicants' reply filed on November 8, 2007, Applicants respectfully request that withdrawn claims 248-262 be rejoined with the examined claims. Applicants reserve the right to petition the restriction of claims 248-262 from the present application.

35 U.S.C. § 112, First Paragraph

The Office alleges that claims 227-234, 240, and 243 are rejected under 35 U.S.C. § 112, and that Applicants have failed to demonstrate possession of the claimed subject matter. Further, the Office alleges that:

Applicants' current claim read on “any” library of peptides, polypeptides or proteins that comprise a VH CDR1 and VH CDR2 that are encoded by DNA sequences comprising sequences encoding the VH CDR1 and VH CDR2 wherein said VH CDR1 and VH CDR2 comprise “an” amino acid sequence according to formula -X₁-Y-X₂-M-X₃- and -X₄-I-X₅-X₆-S-G-G-X₇-T-X₈-Y-A-D-S-V-K-G-, respectively. That is, the claims read on any “dimer” of the -X₁-Y-X₂-M-X₃- and -X₄-I-X₅-X₆-S-G-G-X₇-T-X₈-Y-A-D-S-V-K-G- sequences ... (Office Action at page 6).

The Office goes on to state:

Use of the open-ended "comprising" language in conjunction with the word "an" amino acid sequence rather than "the" amino acid sequence broadens the scope of the claim to include "dimers", "trimers", etc. of the full length sequences. (*Id.*)

Applicants respectfully disagree with the Office's interpretation of the claimed subject matter. However, in the interest of expediting prosecution, Applicants have amended claim 227 to recite (in part) that the VH CDR1 comprises the amino acid sequence according to the formula -X₁-Y-X₂-M-X₃-, and the VH CDR2 comprises the amino acid sequence according to the formula X₄-I-X₅-X₆-S-G-G-X₇-T-X₈-Y-A-D-S-V-K-G-. Thus, the claimed subject matter is clear. Applicants submit that the amendments to claim 227 overcome the rejection.

The Office at page 7 of the Action also alleges that claims 227-234, 240, and 243 are rejected under 35 U.S.C. § 112 for introducing new matter. Applicants submit that the amendments to claim 227 overcome any new matter rejection.

Applicants respectfully request that these 35 U.S.C. § 112 rejections of claims 227-234, 240, and 243 be withdrawn, as the claimed subject matter is supported by the application as filed and the Applicants have demonstrated possession thereof.

35 U.S.C. § 102(e)/103(a)

The Office at pages 8-12 alleges that claims 227-234, 240, and 243 are anticipated by, or are obvious in light of, Huse et al. (US Pat. No. 6,531,580; "Huse"). In part, the Office alleges:

That is, use of the open-ended "comprising" language in conjunction with the word "an" in the phrase "comprises an amino acid sequence" rather than use of the word "the" in the phrase "comprises an amino acid sequence" broadens the claims to encompass any dimer, trimer, etc. of the recited formulas (Office Action at page 10).

Applicants respectfully disagree. Nonetheless, as discussed herein, claim 227 has been amended to more clearly recite that the VH CDR1 comprises the amino acid sequence according to the formula -X₁-Y-X₂-M-X₃-, wherein X₁, X₂, and X₃ are independently selected from the group consisting of A, D, E, F, G, H, I, K, L, M, N, P, Q, R, S, T, V, W, and Y, and the VH CDR2 comprises the amino acid sequence according to the formula X₄-I-X₅-X₆-S-G-G-X₇-T-X₈-Y-A-D-S-V-K-G-, wherein X₄ and X₅ are independently selected from the group consisting of Y, R, W, V, G, and S, X₆ is selected from the group consisting of P and S, and X₇ and X₈ are

independently selected from the group consisting of A, D, E, F, G, H, I, K, L, M, N, P, Q, R, S, T, V, W, and Y.

Applicants submit that the elements of amended claim 227 (and its dependencies) are not taught or suggested by Huse.

Huse is devoid of any description or suggestion regarding a library that contains a collection of members of a family, the family containing a diversity of peptides, polypeptides or proteins, wherein the peptides, polypeptides or proteins each contain a VH CDR1 and a VHCDR2 and are encoded by DNA sequences containing sequences encoding

(a) the VH CDR1, wherein the VH CDR1 includes the amino acid sequence according to the formula $-X_1-Y-X_2-M-X_3-$, wherein X_1 , X_2 , and X_3 are independently selected from the group consisting of A, D, E, F, G, H, I, K, L, M, N, P, Q, R, S, T, V, W, and Y, and

(b) the VH CDR2, wherein the VH CDR2 includes the amino acid sequence according to the formula $X_4-I-X_5-X_6-S-G-G-X_7-T-X_8-Y-A-D-S-V-K-G-$, wherein X_4 and X_5 are independently selected from the group consisting of Y, R, W, V, G, and S, X_6 is selected from the group consisting of P and S, and X_7 and X_8 are independently selected from the group consisting of A, D, E, F, G, H, I, K, L, M, N, P, Q, R, S, T, V, W, and Y.

As a result, because all of the elements recited in claim 227 are not taught by Huse, claim 227 (and its dependencies claims 228-234, 240, and 243) is novel over both of this reference.

Further, regarding the obviousness rejection, Applicants submit that the Office has failed to set forth any reasoning to assert a *prima facie* case of obviousness based on Huse against claim 227 or its dependencies, claims 228-234, 240, and 243. There is no teaching or suggestion in Huse to prepare the claimed library containing the specific VH CDR1 and VH CDR2 sequences recited in the claims. Applicants respectfully request that the obviousness rejection of claims 227-234, 240, and 243 be withdrawn.

Applicants further submit that withdrawn claims 248-262 are also novel and non-obvious for at least the same reasons.

CONCLUSION

Applicants respectfully submit that all of the pending claims are in condition for allowance, which action is expeditiously requested. Applicants do not concede any positions of the Examiner that are not expressly addressed above, nor do Applicants concede that there are not other good reasons for patentability of the presented claims or other claims.

A Request for Continued Examination is being filed herewith.

If this response is not considered timely filed and if a request for an extension of time is otherwise absent, Applicant hereby requests any necessary extension of time. If there is a fee occasioned by this response, including an extension fee, please charge any deficiency to Deposit Account No. 50/2762.

Respectfully submitted,
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